To: Shapiro, Mike[Shapiro.Mike@epa.gov]; Stoner, Nancy[Stoner.Nancy@epa.gov]; Kopocis,

Ken[Kopocis.Ken@epa.gov]

Cc: Grevatt, Peter[Grevatt.Peter@epa.gov]; Travers, David[Travers.David@epa.gov]; Burneson,

Eric[Burneson.Eric@epa.gov]; Allgeier, Steve[Allgeier.Steve@epa.gov]

From: Clark, Becki

Sent: Fri 2/7/2014 4:40:28 PM

Subject: FW: Follow up Qs from today's staff meeting

Mike.

Please see the attached message from Steve Allgeier of OGWDW on the question about whether there was an additive in the MCHM responsible for the licorice smell. Our understanding of this issue has evolved.

From: Allgeier, Steve

Sent: Friday, February 07, 2014 11:19 AM

To: Travers, David; Clark, Becki; Grevatt, Peter; Green, Holly; Bergman, Ronald; Burneson, Eric; Oshida, Phil

Cc: Lopez-Carbo, Maria; Tingley, Kevin

Subject: RE: Follow up Qs from today's staff meeting

Regarding the crude MCHM mixture. During the early stages of the incident it was hypothesized that pure MCHM would smell like alcohol; however, customers complained of a licorice odor. In reviewing the material safety data sheet for the crude MCHM, it was thought that the licorice odor was produced by a constituent of the mixture other than pure MCHM.

However, we learned on a call with West Virginia American Water (WVAW) that Jeff Green from Eastman informed them that the crude MCHM does not have an odorant additive. Jeff said that the odor is coming from the MCHM. Caveat – this is all second hand reports from the chemical manufacturer. We have no direct information regarding the specific source of the odor, but have no reason to doubt the information from Eastman.